

Remarks

The various parts of the Office Action and other matters are discussed below under appropriate headings.

Correction of Office Action Summary

According to the Office Action Summary, claims 43-71 are pending in the application, claims 43-58 are withdrawn, and claims 59-72 are rejected. An examination of the file, however, reveals that claims 43-73 are pending in the application, claims 43-58 are withdrawn, and claims 59-73 are rejected. Clarification is requested.

Species Election Requirement

In response to the species election requirement set forth in the Office Action dated December 2, 2003, the embodiment of a semiconductor device was elected and claims 59-71 were identified as reading on the elected species. In addition, new claims 72 and 73 were added as linking claims so that all of the claims could be properly examined in the present application. Claims 72 and 73 read on the elected species. In addition, claim 72 includes the limitations of claims 43 and 44, and claim 73 includes the limitations of claim 56. Consequently, a search of the elected species will substantially overlap a search of the non-elected species.

In view of the foregoing, a request was made in the reply dated January 2, 2004 that the species election requirement be withdrawn and all of the claims be examined in the present application. The most recent Office Action does not include a reply to this request and therefore the request for reconsideration is herein repeated.

For improved clarity, the preamble of claims 44-55 has been amended to be more consistent with the preamble of claim 43.

Drawings

The drawings are objected to for not showing the feature of claim 67. According to claim 67, the conductive material does not extend below the relatively adjacent air gaps. This feature is shown in Fig. 2F. As shown in Fig. 2F, the conductive material 34, which is disposed on the substrate 32 and having a region thereof bordered by air gaps 38, does not extend below the air gaps 38. Therefore, withdrawal of the drawing objection is respectfully requested.

Claim Rejections - 35 USC § 112

Claim 67 has been rejected for failing to comply with the written description requirement. In the Examiner's supporting remarks, the Examiner points out that the passage cited for support in the reply filed on May 22, 2003, does not support the feature of claim 67. Having reviewed the remarks set forth in the May 22, 2003 reply, it appears that some confusion has arisen from an incorrect claim reference. In the May 22, 2003 reply, first full paragraph, reference was made to claim 67 whereas the claim being discussed was claim 68.

Nevertheless, the feature of claim 67 is clearly supported by Fig. 2F, as discussed above in connection with the drawing objection. Therefore, withdrawal of the § 112 rejection of claim 67 is respectfully requested.

Claim Rejections - 35 USC § 102 and § 103

The art rejections advanced by the Examiner are now based on Fulford Jr. et al. U.S. Patent No. 6,376,330 (herein "Fulford"). In apparent reference to claim 59, the Examiner states that Fulford discloses a semiconductor device comprising, *inter alia*, "the overcoat layer having a portion thereof overlying the conductive material in the region bordered by the air gaps, and said portion extending below the height of the adjacent air gaps". It is agreed that the overcoat layer 22 does have a portion thereof overlying the conductive material in the region bordered by the air gaps. The portion of the overcoat layer overlying the conductive material, however, does not extend below the height of the adjacent air gaps. As should be evident from an examination of Fig. 5 of Fulford, it is not possible for the portion of the overcoat layer 22 that overlies the conductive material 14 to extend below the height of the adjacent air gaps, as this is precluded by the presence of the dielectric layer 16. Moreover, the dielectric layer 16 of Fulford plays an important role in that it is provided to obtain an aspect ratio of the height H to the width W that exceeds one and preferably exceeds two (column 5, lines 6-9).

For at least the foregoing reasons, the rejection of claim 43 and the claims dependent therefrom should be withdrawn.

Regarding claim 68, the Examiner states that "a surface of the conductive material adjacent a respective air gap is covered by a film of non-conducting material (16)". It is noted, however, that according to claim 68 a surface of the conductive material adjacent a respective air gap is covered by a film of non-conducting material that does not extend over the conductive material. As seen in Fig. 5 of Fulford, the

layer of material that covers the surface of the conductive material adjacent an air gap, also extends over the conductive material. Accordingly, Fulford fails to disclose or even suggest this feature of claim 68.

For at least the foregoing reasons, the rejection of claim 68 and the claims dependent therefrom should be withdrawn.

Conclusion

This application is believed to be in condition for allowance and an early issuance of a notice of allowance is earnestly solicited.

Respectfully submitted,

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Date: July 30, 2004


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